The Air Force Stand on "Flying Saucers" -CLi, in a briefing on 22 august 1952

stated by

I. The Air Force has primary responsibility for investigating "flying saucers" The unit connerned with these investigations is a part of the air Sechnical Intelligence Genter at ayton, which and consists of three officers (a Captain in charge) and two civilians. They receive reports of sightings, analyze and attempt to explain them. A standard reporting form has been prograd which is used on a work-while basis. The air force Giffice of Special Investigations cho into each sighting attempting to determine its authenticity and the reliabilit of the observer.

II. (A) The sir force officially denies that "flying saucers" are:

- (1) C.S.secret weapons
- (2) Soviet secret weigens
- (3) Extra-terrestrial visitors

(B) It is believed that all sightings of "flying saucers" are:

- (1) Well known objects such as balloons (over 4000 are released daily in the U.S.), aircraft, meteors, clouds, etc. not recognized as such by the observer.
- (2) Phenomena of the skicophere which are at present poorly understood, e.g., refractions and reflections caused by temperature inversions, ionization phenomena, ball lightning, etc.

III. Not a shred of evidence exists to substantiate the belief that "flying saucers" are material objects not fulling into category IIB(1) above.

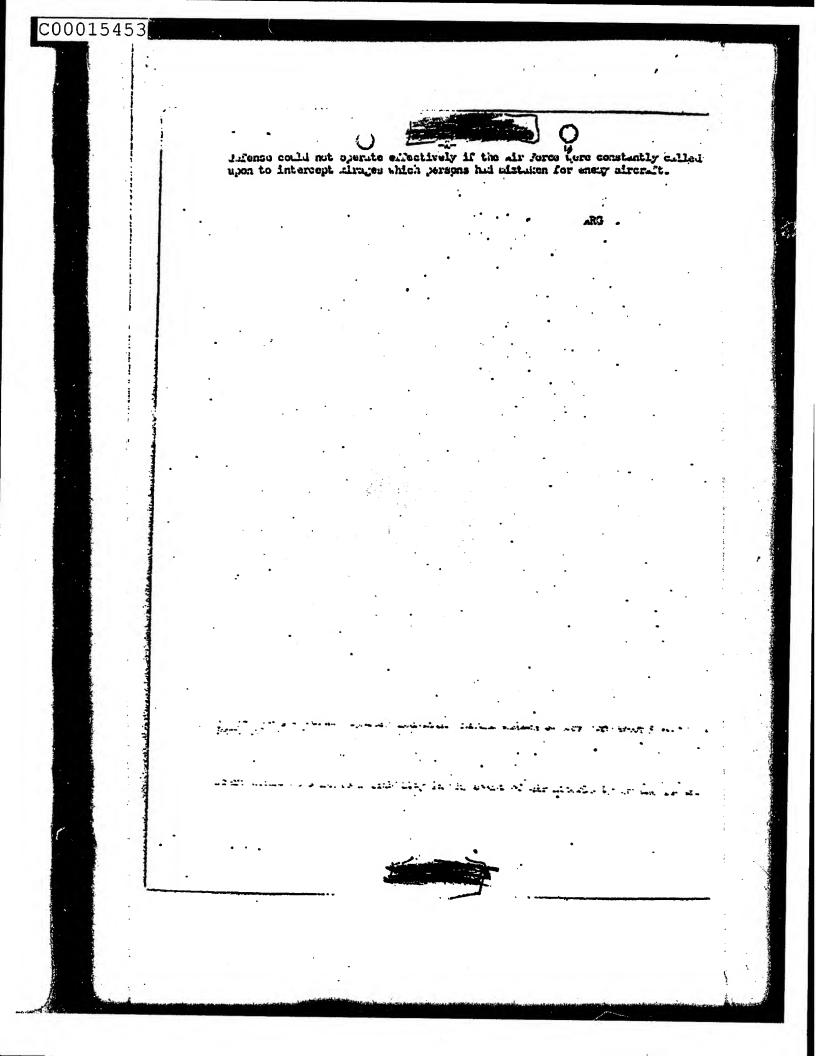
IV. A stury of "flying saucer" sightings on a geographical basis should then to be nore frequent in the vicinity of atomic energy installations (which is explained by the greater security consciousness of persons in those areas). The by-products of atomic fission may in some way act catalytically to produce "flying:saucers" has not been disproved. The greatest masher of sightings has been male at or near Dayton, Chio there the inve lightions are going on.

V. Of the thousands of "Flying success" sighted of which there are records the Mir Force says that 70% have been explained by either HIB(1) or HIB(2) above 2% have been explained as houses and the remaining 20% have not been explained primarily because of the vague descriptions given by observers.

VI. The sir Force is mostly interested in the "source" problem because of its psychological variant indications. In revisiving publications designed for Sovi construction, there has not been a single redownor to "flying sameers". On the other sami, several "sameer" societies in the United States have been investigat key members of some of these modefies which have been instrumental in keeping th "Flying sameer" or no before the public have been exposed as being of doubtich loyalty. Furthermore the posities, in some cases, are financed side an uninear source. The sir Force realizes that a public subs of air attacks by an energy, air

Approved for Release

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C00015453 19 Jugast 1952 83 The purpose of this presentation is to report the findings of the OIE Study Group as to the implications of the Flying Sancar problem. I will shart with a result of what we have done and a dust inistary of the subject - I'r. Inghill outline the Mr Force effort . will so into the aplanations of mightings - I will give you our conclusions. " Our group r viewed available intelligence, official reports, press and magazine coverage and the main popular books. Indams of the Soviet press were seemed. To spent a day at Wright Field with the officers -· conducting the Air Force study, and finally us took the problem to a group of our our consultants. The Sencer Arrow in this country started in June 1947 with a report of nine discs flying in formation post formt Bainter at an estimated speed of 1000 miles per work. This was followed in whistely by a continuing and increasing flood of reports over the nonline. ÷. • • • • • • The effore, in 172, Air Farm initiated Project Carper to study

the planama and in Receiver 1749 released sections of its secret

report to the press. The conclusion was that the signance starred

from Sinco counces

1. Mass hystoria

2. Mallucination and hoat

3. Esisterprotation of inous objects

This satisfied man of the public but not cortain sensational

unitars. The resulting highly speculative books and regraine articles combined with increasing reports of alghbings built up such a resurgence

of public interest that Mir Force, carly in 1951, respond its study,

intercept the unidentified objects. General Scaford gave their

instituted a world-wide reporting system, and alerted its bases to .

interin conclusions in his recent press conference. These ware that maketis of the cases should "no puttern of anything consistent with any

nermes to the United States"; that the recent Machington reports were proteinly due to "emperated inversions"; and that the unexplain 4

in , sightings could not have resulted from any appriments or tests conducted

by the United States.

to the for the infotony.



In successiving this discussion, I would restate that on three of the usin theories in explanation of these phenorum, - a US development, a Russian downlownest, and space sides - the evidence elither of fact or of logic is so strundly against them that they warrant at present no more than speculative consideration. However, it is important that there are many who believe in them and till continue to do so in spite of any efficient pressurement which may be made. This whole affair has demonstrated that there a fair proportion of our population which is mentally conditioned to acceptance of the incredible. Thus we arrive at two demonstrates thick, in a situation of international tension, seen to have Mational Security implications.

Emilion, we mentioned our sourch of Soulet press. All made a similar source. With world-wide sightings reported, we have found not one report or connect, oven satrical, in the Russian press. This could

result only from an official policy decision and of course raises the question of the and of thether or not these sightings could be used

fron a psychological warfare point of view either offensively or defen-

rively. My Jorce is more of this and had invisit and a maker of the

civilian groups that have group up to collow the subject. One -- the

Civilian Saucer Consistent in California has substantial funds, structly influences the editorial policy of a number of nonspapers and has localars whose connections may be questionable. Air Force is matching this experimentian because of its power to touch off nace hysteria and parie. Furthers we, from an intelligence point of view, should watch for any indication of Russian efforts to expitalize upon this present families credulity.

Of over prester ment is the sound danger. Our air warring system will univaluatly always depend upon a combination of reduc securing and visual observation. To give Russia the expetility of delivering an ier attack spainst us, yet at any given pound now, there may be correct a dozen <u>official</u> unidentified sightings plus many unofficial. At the menor of attack, her will up, on an instant

basis, distinguish hardware from pienton? The casers, of course,

is that will far preater

trailedge in antiowed of the cuscos back of the sightings - the little understood phenomea 'r. Colleor has described - we will run the increaring mink of folce alorts and the oven greater danger of tablang the real as folce. This is primarily an operational research problem but as long as it exists it will have intelligence implications because of its becoming on air valuerability.

One purpose in this survey has been to excise that is being does and mine some ascessment of its validity. The Air Force shalf is valid. On a case by ease basis, the great bulk of the sightings have been and will continue to be explained — but the limited case a preach will never sulve this second real problem — positive identification.

As to that should be dom, we propose to discuss the research problem with the Research and Development Board and to pass on to Mr Force an offer from M.T.T. to appind in a study of some of the Audmentals. We suppose that the psychological possibilities both for and appind us should be investigated. From an intelligence point of view, GH has

been and will continue watching Russian research and development in the scientific fields involved.

DELTT

15 August 1952

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In the next for minutes, I intend to touch briefly upon the official explanations of the great majority of sightings of unidentified flying objects (or UNO's) and mention possible phanemens which may account for some of the open cases.

a starter

Before we elaborate upon the current applanations I would like you to keep in mind certain facts which are generally cormon to all reports.

First, is the excessions of those mixing reports. These people are cortain that they have seen cornthing.

Secondly, objects sighted almost always are reported to be sympathic the sky thereby providing no point of reference.

Thirdly, without a reference point, a valid estimation of size, speed, distance of relative motion is wirtually impossible.

Finally, no debris or material evidence has ever been recovered

following an unexplained sighting.

In oach case of reported sightings exists the personal element. This

is the combined effect of psychological and physiological factors which

individually or together may have outstanding importance in the securacy of

a person's report. These factors gamerally cannot be determined edequately.

The psychological factors arat

Kental conditioning by newspaper stories of earlier reported sighting Individual emotional response with respect to the unknown,

Desire for publicity resulting in "enbroidering" of facts or complet:

fabrication.

. . .

. . .

Emotion of chase of interceptor pilote.

. The major physiological factors are:

General physical condition of the person at time of sighting;

conditions of fatigue, snomia.

Eristence and extent of aye strain immediately preceding sighting.

Insufficient night adaptation.

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For let us take up the explanations which have been used to account for well over a thousand cases. Under the entegory of: "Mainterpretation of identifiable objects," ATIC feels that the most prevalent misinterpretations

have been: free baloons, aircraft, astronomical bodies, strospheric



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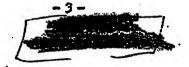
phenomena, instrument errors and windblown objects.

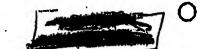
There are two types of high altitude balloons, radiosomie and the Havy Ekyhook. They may reach altitudes as high as 20 miles. Although both types are tracked and plotted for some distance, there generally is no accurate confirmation of destruction. Consequently, because of the large number released duily by the weather services and research groups in the U.S., it is possible that they might appear over almost any geographic location. The longevity of the gas bags is not known but is believed to be possibly weaks. Eight-launched balloons carry a bright light to facilitate tracking. Many others have radar-reflecting panels.

The Hantell case, referred to by Mr. Strong, has been explained as a misinterpretation of a Mary Skyhook balloon. This was in January 1947. There were three interceptor aircraft. One, piloted by Capt. Thomas Hantell rediced in that he was going to climb to 20,000 feat in an attempt to close in. His rather wild report that the object was "presendous" and his subsequent crash are laid to the effects of enomia since his place carried no oxygen

equipment.

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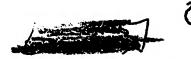
A case under known conditions occurred some months age at bright Field

which illustrates the fact that objects at high altitudes may be in sharp illumination even one or two hours before down or after. This case also points up interesting psychological factors.

The time was near duck. Captain Ruppelt was called out to witness a sighting of three red lights in the sky. Even through binocolars he could not determine their nature. An E-94 interceptor climbed to \$3,000 feet. At this altitude the pilot could see clearly that the objects were a cluster of three Skylnok halloons still well above him, stilling an even course screess the sky. By this time, telephone reports had started to come in. The objects were described as violently meneuvering "saucers" of various shapes and colors. Even "looping" meneuvers were reported. She medical staff at Wright Field, including the senior psychologist, witnessed the sighting. The next day this staff turned in a report stating that, despite the official statement that these objects were halloons, they felt that this was in error and that the sighting cust have been of some other unknown origin.

Probably the second most common misinterprotation is that of conventional.

aircraft.



In the daytize, mirgraft, particularly those that are unpulated, can give extremely brilliant reflections of sunlight. An interesting case under known conditions is one which occurred last year in Maryland.

A group of minerati design engineers went into the country to witness tests of their can jet mirplane. The three test minerate, with unpainted wings and red fuseleges, passed directly overhead. All engineers agreed that if they had not incom what the objects wave, and mines they could not observe the milver wings against the sky, they would have reported the red fuseleges as finning trails and they would have imagined objects emitting them.

At nighttine the possibility for misinterpretation of sizeraft increases. First, there are the dusk and dawn illuminations already mentioned. Similarly, misinterprotations have been made of running lights or reflections of aircraft in clouds. There are a number of reports of cylindrical objects with square tails or having lighted "portholes" which have been explained as distorted images of conventional aircraft profiles on clouds of ice crystals. Some time age a priceting bright yellow light was reported moving

through the shy near Fittsburgh, Fennsylvanis. For months this report was rologated to the "unomplained" file. A few weeks ago in Mashington a man

who was familiar with this report any an anti-collision light installation on a Capital Airlines airplane. This new safety device, a light mounted on the nose of the airplane, oscillates back and forth laterally similar to those installed on some ambulances and police cars. A check with Capital Airlines revealed that an airplane fitted with such a light had "checked in" while flying near Fitteburgh at the exact time and place of the reporting aighting.

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particularly Vanue, can be seen clearly as a bright white object, even at high more under certain conditions. At night, networs of various variaties have been mistaken for managemening lights. The luminous networ trail of iomized gas has been picked up by redar and at times misunderstood. This

Lat us tuen now to astronomical phenomena. In the daytime some planate,

Latural phonenens in the Earth's atmosphere have caused many misinterpretations. Figh altitude "jet streams" traveling at high velocities, temperature inversions and conditions of turbulent mixing of air of greatly

ionized trail may remain visible to the eye for as long as one hour.

different temperatures and densities emist and are not charted. They account for optical as wall as rainr abormtions in a number of cases. In one case

of a ground reder sighting in Expland the pilot of an interceptor aircraft, with his AI gear "locked on" a "blip". found hinself on a steeply sloping downwards course at low altitude. This occurred three times indicating that the target was on the ground and that the course of the radar bean had been distorted. It should be noted that reder momalies both internal and external in nature still exist in disturbing numbers. The shility of a radar observer to accurately determine the validity of "blips" on his coope is directly proportional to the length and breadth of his experience.

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Cloud effects have affected the securacy of a number of sightings. Repidly coulding clouds land an apparent notion to a fixed body. The noon or a bright planet shing through a cloud hole at times does appear as a "finning object." Other "emplainable" mininterpretations which are known to have accounted for reports of sightings include a wide variety of objects. Windblown objects is one. Such an incident was reported by the U.S. Coursel at Herida, Tucatan, Herico. Here is his actual reports "it about 2:00 p.m. inst Sunday, I observed a silvery, shining.

disc-like object floating in the clear, blue sky almost directly .

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overhead, travelling in a northweatorly direction. I believed that the object was a flying disc and was about to run to the house and folds by compare when I noticed that the object was balow the level of some wultures managementing at a great height. This proved to us that the disco-like object was considerably scaller than a vulture. During the course of two hours I say a total of three of these objects, all going in the same direction, but at times appearing to be stationary. Later in the afternoon I formi one of these 'discs' on my front laws. It was a sold enclosed in a fluffy mans of silken fiber Fed it hot been for the scaring birds and my curiosity, I would undoubtedly have reported that I had seen several 'flying discs'. . . . I an enclosing the 'flying disc' which I captured...in my front yard." Another misinterpretation is that of searchlights on clouds which has been the campa of several reports of nightings as in the recent case

described by the Secretary of Dafanze. Finally, there is a case which occurred at Frenchmen's Flat, Kevada.

the second s

"Alips" in formation were picked up on the many scope. They ware

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reported to be traveling at terrific speed at 30,000 feet. It happened that the reporting station had a searchlight and it was turned on in the direction of the main eighting. It was immediately discovered that the objecto were Canadian goese flying at 300 feet altitude.

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The above explanations are bolieved by ATIC to account for some 80% of the sightings reported. They feel that the remaining 20% night be reducible to 10% were it not for these reasons:

Insufficient information reported.

Incorrect information unditingly or purposely reported. Insufficient or total lack of subsequent investigation of details. This still leaves ATIC with a possible 20% of sightings for which there is no available explanation.

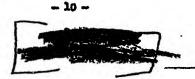
Considering that the remaining cases night have been crossed by little understood matural phenomeno, the OSI Panel conferred at length with three of our consultants in Boston. These non are outstanding in the fields of geophysics, electronics and chamistry. They explasized to usy that there

are many scientific frontiers which have as yet been little explored or aharted. In these areas coour phenomena which may account for optical or alectronic aberrations as well as for things actually seem. They listed three categories: atmospherics, ionization, and extra-torrestrial phenomena. They suggested also that products of nuclear fission night have some effect upon these.

In the field of atmemberies would be the temperature inversions stressed by General Samford. This phenomenon exists but the exact mechanics of its cause, its nature and manner of dissipation are not wall understood. Neither is its effect upon electromagnetic and light beams causing their refraction or reflection. Little is known of clouds of five crystals which exist at altitudes to 50,000 feet. Studies of the winds and the physical and chemical properties of air at very high altitudes have only recently golumence, with the availability of such agents at high altitude balloons and research rockets.

The second category was ionization. The Meaviaids (or "E") layer of

ionization, the "I" layer above it, and their relation to radio transmission



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were thought ten years ago to be fairly well understood. Within the past year, however, the whole concept of the "F" layer has been changed. It has been discovered that it oplits sometimes into two layers of ionization known as F-1 and T-2. Recent tests utilizing these layers have shown it possible to transmit as far as 1,000 miles using certain VHF frequencies. This is totally opposed to the provious well accepted opinion that maximum VHF transmission distance was limited to "line of sight."

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Clouds of ice crystals become luminous under cortain conditions of ionization. The factors affecti, the way in which the electrostatic charge on the earth is continuously rejusensted by thunderstorn lightning are obscure. Ball lightning, a luminous phenomenon which has been reported for conturies, appears in various colors but its nature is not known. St. Elects fire, corens discharge and Aurora Borealis are catalogued in a variety of forms but their exact nature is unknown. The novement of vortices of snoke particles, clouds of noisture and ice crystals will cause changes in electrostatic potential and may be affected by the carth's magnetic field.



material tossed aloft could appreciably affect atmospheric phenomena. For instance, the cosmic and games natural radiation which pours is daily from outer space is many thousands of times greater than the radiation produced by atomic book blasts.

This list could be extended at length. Suffice to say, our ignorance of the nature and controlling factors of all of the above is immense. Effects of interaction between these natural phenomena and redicactive

exterial in the air can only be conjectured. The appearence of unusual optical or radar sightings caused by these phenomena is possible. Their

occurrence connot be predicted.

There is some strength to the hypothesis that many of the unexplained sightings of UFO's may be electromagnetic or electrostatic in character.

Factors supporting this hypothesis are: .

Absence of sound, although apparently noving rapidly in the

Bizospiere.

Flerores are apparently affected by shock waves or electromagnetic

. radiation of aircraft.

Reports of erratic operation of various kinds of instruments in

C00015453 the vicinity of sightings. Sightings of URO's reported at Los Alonios and Oak Ridge, at a time when the background rediction count had risen inexplicably. Here we run out of even "blue yonder" explanations that night be temple. and, we still are left with members of incredible reports from credible observers. ÷ S. \$ ÷. . ·· - - 5 - ...*



14 August 1952

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FLITING SAUCERS

During the past weeks, with the phenomenal increase in the number of Flying Saucer reports there has been a tremendous stimulation of both public and official interest in the subject. Requests for information have poured in on the Air Force, including an official query from the White House. Finally, on July 29, General Sauford held a press conference in which he stated, that analysis showed "no pattern of anything remotely consistent with any menace to the United States;" that recent Mashington sightings were possibly due to "temperature inversions," others to ionized clouds, ice formations, etc.; that instrumentation would be emphasized henceforth in the Air Force study. He emphatically stated that the unexplained sightings could not have resulted from any experiments or tests conducted by the United States.

it this point, CSI felt that it would be timely to make an evaluation of the dir Force study, its methodology and coverage, the relation of its conclusions to various theories which have been propounded, and to try to reach some conclusion as to the intelligence implications of the

problem — if any. In view of the wide interest within the Agency, this briefing has been arranged so that we could report on the survey. It must be mentioned that outside knowledge of Agency interest in Flying Sameers carries the risk of making the problem even more serious in the public mind than it already is, which we and fir Force agree must be avoided.

In order to supply both breadth and depth to the survey we have reviewed our orm intelligence, going back to the Swedish sightings of 1946; reviewed a large number of individual official reports, recent press and magazine coverage and the main popular books. Indexes of the Soviet press were scamed. We interviewed a representative of Air Force Special Study Group. Following this, we spent a day at Wright Field in a thorough discussion with the officers conducting the ATIC study, and finally we took the problem to a selected group of our own consultants, all leaders in their scientific fields.

From all this, we have come up with facts, theories, explanations and some conclusions, which we will cover in a brief surmary of Flying

Snucers history, an analysis of the ATIC work, and a discussion of the .

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explained sightings and of possible theories regarding the unexplained. We make no recommendations of action. We would ask that questions be held till the end.

The Saucer furore in this country started in June 1947 when Kenneth Arrold, a reputable business man flying his own plane reported nine discs flying in formation past Lount Rainier at an estimated speed of 1000 miles per hour. This was quickly followedin early July 1947 by reports from a doctor in Phoeniz, Arizona, the pilot and co-pilot of a United Air Liner at Boise, Idaho, and field staff sembers at Huroc Test Base, California. The public was somewhat preconditioned by the earlier Stellsh reports of unidentified rockets and the press had a field day. knong the continuing and increasing mass of reports over the months, three further incidents which received wide publicity might be mentioned as they did much not only to maintain interest but also to supply bases for some of the more fantastic theories. In January 1948, an interception was attempted at Comman Field Kentucky and the pilot - Captain Montell crashed and was Milled. In October 1948, a National Guard fighter pilot at Fargo, North Dekota - Lt. Gorman - coming in after dark spotted a

noving light below him — also seen from the field — and for twenty minutes put on a dog-fight with it, finally, being outdistanced at 17,000 feet. The third incident occurred in April 1949 at White Sands Proving Ground when a Many Commander, tracking a missile flight by theodalite, watched two discs maneuvering at high speed around the test rocket. Three such sightings were made at White Sands within a month.

Reambule in 1948, Air Force initiated Project Saucer to study the phenomena, iscued a preliminary report in April 1949 and in December 1949 released sections of its secret report to the press. The conclusion was that the sightings stemmed from three causes:

1. Mass hysteria

2. Hellucination and hoax

3. Misinterpretation of known objects

This satisfied much of the public but not certain sensational writers. The resulting highly speculative books and magazine articles combined

a mith continued reports of sightings built up such a resurgence of public

interest that Air Force, early in 1951, reopened its study, instituted a world-mide reporting system, and alerted its bases to intercept the



unidentified objects. Planes had orders not to shoot.

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Now, let's examine for a moment what all, these people claim to have seen. Grouped broadly as visual, radar, and combined visual and radar, ATIC has two major visual classes — first, spherical or elliptical objects, usually of bright metallic lustre, some small. (2 or 3 feet across) most estimated at 100 foot diameter and a few 1000 feet wide. There are variants in this group, such as torpedos, triangulars, pencils, even mattress-shapes. These are all deglight reportings.

The second visual group, all night reporting, consists of lights and various luminosities, such as green, flaming-red or blue-thite fire balls, moving points of light, and luminous streamers.

Both categories are reported as single objects, in non-symmetrical groups and in formations of varying numbers.

Reported characteristics include three general levels of speed: hovering; modernite, as with a conventional aircraft; and simpendous, where remains the state of the state of

nenouvering was reported in scatchat less than 105. Accelerations have

been given as high as 20 g's. With few exceptions, there has been a

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complete absence of sound or vapor trail. Evasion upon approach is

concon.

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Padars have shown many unidentified "blips" but there is no reported instance of complete tracking in and out of the maximum drum, and no report of a track from station to station. The blip, in almost every case, passed through the center of the scope.

In combined visual and radar sightings, I might mention as illustrations three specific reports.

First, a visual signing from a plane over Sandy Hook coincident with a blip seen on a ground radar at Fort Lonnouth, New Jersey.

Second, a recont Far East report from an aircraft carrier operating between southern Korea and Honshu. Here ships radar reported a high speed target approaching from the north. Observers on the bridge picked it up visually as a plane. Then still far out, it did a superspeed 160° turn and shortly thoreafter split in two, disappearing both visually

and in the PPI scopes.

The third occurred a few days ago at Wright Field and has not yet

been fully analyzed. Two F-94's with damera guns were vectored in 00

a blip. Both pilous sighted an object and one locked on with his AI e mignont. Reaching his maximum allowable altitude, he triggered his camera and the negative shows "an object."

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Since 1947, there have been about 1500 official reports of sightings plus an enormous volume of letters, phone calls and press reports. During this July alone, official reports totalled 250. Of the 1500, ATIC carries 20% as unexplained and of those received since the first of this year, 20%. The model interaction of fully investigation.

Now to shift arey from Air Force for a moment and into the public domain, there are four major theories in explanation of the Flying Saucer.

First; that it is a U.S. Secret meapon development. This has been denied officially at the highest level of government and to make doubly cortain we queried Dr. Juitnan, Chairman of the Research and Development Board. On a Top Secret basis, he, too, denies it. However, in the light of the Hamhattan District early super security, two factors night be mentioned which tend to confirm the denials - first, the official action of electing all Air Force commands to intercept, and second, the

unbelievable rish aspect of such flights in established airlanes.

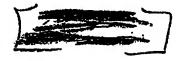
The second theory is that these are a Russian development. Though

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we know that the Russians have done work on elliptical and delta wing principles, we have absolutely no intelligence of such a technological advance as would be indicated here in either design or energy source. Further, there seems to be no logical reason for the security risk which would be involved and there has been no indication of a reconnaissance pattern. However, it should be montioned that there is a totally unsupported thesis that this may be a Russian high altitude development of the World War II Jap balloon effort using preset flares and the resulting US press reports to check flight tracks.

The third theory is the man from Mars — space ships — interplanetary travellers. Even though we might admit that intelligent life may exist elsewhere and that space travel is possible, there is no shred of evidence to support this theory at present. There have been no astronomical observations in confirmation — no slightest indication of the orbitting thich would probably he nocessary — and

no tracking. However, it night be noted that Condr. Mc Laughlin . (of the Maite Sands report), a number of Ceneral Mills balloon people



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and many others are reported to be convinced of this theory.

The fourth major theory is that, now hold by the Air Force, that the sightings, given adequate data, can be explained on the basis either of:

Misinterpretation of known objects, or of as yet little understood

natural phenomena,

incluses of the or

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8-3 So much for the history of the problem. Ar. Englatt now pick up with an analysis of the Air Force study.